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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,617	05/08/2006	Kazumari Kobayashi	290768US2PCT	3715
22850	7590	03/18/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
DAVIS, PATRICIA A				
ART UNIT		PAPER NUMBER		
4111				
NOTIFICATION DATE		DELIVERY MODE		
03/18/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/578,617

Applicant(s)

KOBAYASHI ET AL.

Examiner

PATRICIA DAVIS

Art Unit

4111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date See Continuation Sheet
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :5/8/2006;8/8/2006; 1/9/2007; 7/18/2007.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

5 A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10 Claims 1-10 are rejected under 35 U.S.C. 102(b) as being unpatentable by Hikata et al. (JP 7-94193) (hereinafter "Hikata").

Regarding claim 1, Hikata teaches an active material for a battery anode, the material is made of zinc and virtually contains no lead (see paragraphs 0001 and 0010).

15 Although, Hikata does not specifically teach that the disclosed material exhibits the recited change in weight due to corrosion upon exposure to the electrolyte solution as claimed. However, regarding composition claims, if the composition is the same, it must have the same properties (see MPEP § 2112.01, II.). Consequently, as Hikata teaches the same material composition, it is inherently anticipated that the active material for the battery anode would exhibit the same properties as recited in the claim.

20 Regarding claim 2, Hikata teaches the active material having a concentration of 99.99% or more of zinc metal (see paragraph 0010).

Regarding claim 3, Hikata teaches the active material consists of zinc for the major substance with 0.01-0.07 percent mass of bismuth (1000 ppm or 0.1%) (see par. 0010 and Table 2, line 74).

Regarding claim 4, Hikata teaches the active material consist of zinc for the major substance with addition and compound of 0.01-0.007 percent by mass of bismuth (1000 ppm or 0.1%), 0.0003-0.03 percent by mass of magnesium (100 ppm or 0.01%), and 0.001-0.05 percent by mass selected from zirconium, strontium, barium, indium, and aluminum (100 ppm or 0.01% strontium) (see par. 0010 and Table 2, line 74).

Regarding claim 5, Hikata teaches an active material for a battery anode, the material is made of zinc and virtually contains no lead (see pars. 0001 and 0010).

Although, Hikata does not specifically teach that the disclosed material exhibits the recited change in weight due to corrosion upon exposure to the electrolyte solution as claimed. However, regarding composition claims, if the composition is the same, it must have the same properties (see MPEP § 2112.01, II.). Consequently, as Hikata teaches the same material composition, it is inherently anticipated that the active material for the battery anode would exhibit the same properties as recited in the claim.

Regarding claim 6, Hikata teaches the active material having a purity of 99.99% by mass or more of zinc metal in major substance (see pars. 0001 and 0010).

Regarding claim 7, Hikata teaches the active material consists of zinc for the major substance with 0.01-0.07 percent mass of bismuth (1000 ppm or 0.1%) (see pars. 0001 and 0010 and Table 2, line 74).

Regarding claim 8, Hikata teaches the active material consist of zinc for the major substance with addition and compound of 0.01-0.007 percent by mass of bismuth (1000 ppm or 0.1%), 0.0003-0.03 percent by mass of magnesium (100 ppm or 0.01%), and 0.001-0.05 percent by mass selected from zirconium, strontium, barium, indium,

and aluminum (100 ppm or 0.01% strontium) (see pars. 0001 and 0010 and Table 2, line 74).

Regarding claim 9, Hikata teaches a method of manufacturing a manganese dry battery with use of an anode zinc plate which is processed from an anode active

5 material sheet in a temperature in a range of 120-210 degree Centigrade (180-220 degree Centigrade) where the material contains zinc and the addition of bismuth (see pars. 0006 and 0013; Table 2, line 74; and claim 1).

Regarding claim 10, Hikata teaches a method of manufacturing a manganese dry battery with use of an anode zinc plate which is processed in a temperature ranging

10 from 100-250 degrees Centigrade (180-200 degrees Centigrade) from an anode active material sheet which material contains zinc for major substance with addition and compound of 0.01-0.7 percent by mass of bismuth, 0.01-0.007 percent by mass of bismuth (1000 ppm or 0.1%), 0.0003-0.03 percent by mass of magnesium (100 ppm or 0.01%), and 0.001-0.05 percent by mass selected from zirconium, strontium, barium,
15 indium, and aluminum (100 ppm or 0.01% strontium) (see pars. 0010-0013 and Table 2, line 74).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICIA DAVIS whose telephone number is (571)270-
20 7868. The examiner can normally be reached on 7:30am-5pm EST. Monday-Friday, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sines can be reached on 571-272-1263. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

- 5 Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic
- 10 Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

15 P.D.

/Brian J. Sines/
20 Supervisory Patent Examiner, Art Unit 4111